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DESCRIPTION

This application is an application under 35 USC § 371 of PCT International Application No. PCT/JP01/02637 which has an international filing date of May 29, 2001, which claims priority on Japanese Application No. 2000-099506 filed March 31, 2000.

MATCHED FILTER AND CORRELATION DETECTION METHOD

5 Technical Field

The present invention relates to a matched filter used for synchronization establishment processing in a spread spectrum communication system and a correlation detection method using the matched filter.

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Background Art

In mobile communications, a spread spectrum communication with high frequency utilization efficiency capable of high-speed and high quality data communication, a CDMA (Code Division Multiple Access) system in particular, is becoming mainstream in recent years.

An area covered by one base station is called a "cell". If it is possible to increase the radius of a cell, the number of base stations can be reduced. Thus, the radius of a cell is an important factor in a mobile communication system and the radius of a cell may actually extend a few tens of km.

In the case where the radius of a cell reaches a few tens of km, the distance from a mobile unit to a base station varies a great deal when the mobile unit is close to the base station and when the mobile unit is located near the cell boundary. Therefore, the amount of delay of a signal received by the base station varies a great

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